AMENDMENTS TO THE CLAIMS

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A method of producing ~~particles~~ a particulate suspension comprising:

providing:

a supercritical fluid;

a first solvent that is soluble in the supercritical fluid;

a second solvent that is substantially insoluble in the supercritical fluid and is at least partially soluble in or miscible with the first solvent; and

a solute that is soluble in the first solvent and is substantially insoluble in the second solvent and the supercritical fluid;

contacting the first solvent, the second solvent and the solute together to form a solution;

contacting the solution with the supercritical fluid ~~to extract the~~ in an extraction chamber maintained at a temperature and pressure above the critical point of the supercritical fluid, the supercritical fluid extracting the first solvent from the solution and ~~precipitate~~ thereby causing the solute to precipitate in the form of particles that ~~are~~ become suspended in the second solvent and thus form the particulate suspension; and

separating the ~~particles suspended in the second solvent~~ particulate suspension from the first solvent ~~dissolved in the supercritical fluid when the supercritical fluid is in a supercritical state~~ by

flowing the first solvent out of the extraction chamber with the supercritical fluid while maintaining the supercritical fluid in a supercritical state,

separately flowing the particulate suspension out of the extraction chamber and into a collection vessel,

isolating the collection vessel from the extraction chamber, and draining the collection vessel to yield the particulate suspension.

Claim 2 (original): The method according to claim 1 wherein the solute comprises a biologically active substance.

Claim 3 (original): The method according to claim 1 wherein the supercritical fluid is selected from the group consisting of supercritical carbon dioxide, dimethylether, straight chain or branched chain C1-C6 alkanes and combinations thereof.

Claim 4 (original): The method according to claim 1 wherein the solution further comprises a plurality of solutes and wherein the particles suspended in the second solvent comprise the plurality of solutes.

Claim 5 (original): The method according to claim 4 wherein the plurality of solutes comprises a first solute comprising a biologically active substance and a second solute comprising an excipient selected from the group consisting of a polymer, a wax, a lipid and combinations thereof.

Claim 6 (original): The method according to claim 1 wherein the first solvent comprises an organic solvent.

Claim 7 (original): The method according to claim 6 wherein the first solvent is selected from the group consisting of dimethyl formamide, dimethyl sulfoxide, alcohols, acetone, ethyl acetate and chloroform.

Claim 8 (original): The method according to claim 1 wherein the second solvent is water.

Claim 9 (original): The method according to claim 1 wherein the average particle size of the particles suspended in the second solvent is from about 10 nm to about 10 μm.

Claim 10 (cancelled)

Claim 11 (previously presented): A method of producing ~~particles~~ an aqueous particulate suspension comprising:

providing:

supercritical carbon dioxide;

an organic solvent that is substantially soluble in supercritical carbon dioxide;

water; and

a biologically active substance that is soluble in the organic solvent and is substantially insoluble in water and supercritical carbon dioxide;

contacting the organic solvent, water and biologically active substance together to form a solution;

contacting the solution with the supercritical carbon dioxide ~~to extract~~ in an extraction chamber maintained at a temperature and pressure above the critical point of the supercritical carbon dioxide, the supercritical carbon dioxide extracting the organic solvent from the solution and thereby causing the biologically active substance to precipitate ~~the biologically active substance~~ in the form of particles that ~~are~~ become suspended in water and thus form the aqueous particulate suspension; and

separating the ~~particles suspended in water~~ aqueous particulate suspension from the organic solvent ~~dissolved in the supercritical carbon dioxide when the supercritical carbon dioxide is in a supercritical state~~ by

flowing the organic solvent out of the extraction chamber with the supercritical carbon dioxide while maintaining the supercritical carbon dioxide in a supercritical state,

separately flowing the aqueous particulate suspension out of the extraction chamber and into a collection vessel,
isolating the collection vessel from the extraction chamber, and
draining the collection vessel to yield the aqueous particulate suspension.

Claim 12 (original): The method according to claim 11 wherein the solution further comprises a second solute comprising an excipient selected from the group consisting of polymers, waxes, lipids and combinations thereof, and the particles suspended in water comprise the biologically active substance and the excipient.

Claim 13 (original): The method according to claim 11 wherein the organic solvent is selected from the group consisting of dimethyl formamide, dimethyl sulfoxide, alcohols, acetone, ethyl acetate and chloroform.

Claim 14 (original): The method according to claim 11 wherein the average particle size of the particles suspended in water is from about 10 nm to about 10 μm.

Claims 15 and 16 (cancelled)

Claim 17 (new): A method of producing a particulate suspension comprising:
providing:
a supercritical fluid;
a first solvent that is soluble in the supercritical fluid;
a second solvent that is substantially insoluble in the supercritical fluid and is at least partially soluble in or miscible with the first solvent; and
a solute that is soluble in the first solvent and is substantially insoluble in the second solvent and the supercritical fluid;
contacting the first solvent, the second solvent and the solute together to form a solution;
contacting the solution with the supercritical fluid in an extraction chamber maintained at a temperature and pressure above the critical point of the

supercritical fluid, the supercritical fluid extracting the first solvent from the solution and thereby causing the solute to precipitate in the form of particles that become suspended in the second solvent and thus form the particulate suspension; and

separating the particulate suspension from the first solvent by

flowing the first solvent out of the extraction chamber with the supercritical fluid while maintaining the supercritical fluid in a supercritical state, and

depressurizing the extraction chamber to yield the particulate suspension.

Claim 18 (new): The method according to claim 17 wherein the solute comprises a biologically active substance.

Claim 19 (new): The method according to claim 17 wherein the supercritical fluid is selected from the group consisting of supercritical carbon dioxide, dimethylether, straight chain or branched chain C1-C6 alkanes and combinations thereof.

Claim 20 (new): The method according to claim 17 wherein the solution further comprises a plurality of solutes and wherein the particles suspended in the second solvent comprise the plurality of solutes.

Claim 21 (new): The method according to claim 20 wherein the plurality of solutes comprises a first solute comprising a biologically active substance and a second solute comprising an excipient selected from the group consisting of a polymer, a wax, a lipid and combinations thereof.

Claim 22 (new): The method according to claim 17 wherein the first solvent comprises an organic solvent.

Claim 23 (new): The method according to claim 22 wherein the first solvent is selected from the group consisting of dimethyl formamide, dimethyl sulfoxide, alcohols, acetone, ethyl acetate and chloroform.

Claim 24 (new): The method according to claim 17 wherein the second solvent is water.

Claim 25 (new): The method according to claim 17 wherein the average particle size of the particles suspended in the second solvent is from about 10 nm to about 10 μm.

Claim 26 (new): A method of producing an aqueous particulate suspension comprising:

providing:

supercritical carbon dioxide;

an organic solvent that is substantially soluble in supercritical carbon dioxide;

water; and

a biologically active substance that is soluble in the organic solvent and is substantially insoluble in water and supercritical carbon dioxide;

contacting the organic solvent, water and biologically active substance together to form a solution;

contacting the solution with the supercritical carbon dioxide in an extraction chamber maintained at a temperature and pressure above the critical point of the supercritical carbon dioxide, the supercritical carbon dioxide extracting the organic solvent from the solution and thereby causing the biologically active substance to precipitate in the form of particles that become suspended in water and thus form the aqueous particulate suspension; and

separating the aqueous particulate suspension from the organic solvent by

flowing the organic solvent out of the extraction chamber with the supercritical carbon dioxide while maintaining the supercritical carbon dioxide in a supercritical state, and

depressurizing the extraction chamber to yield the aqueous particulate suspension.

Claim 27 (new): The method according to claim 26 wherein the solution further comprises a second solute comprising an excipient selected from the group consisting of polymers, waxes, lipids and combinations thereof, and the particles suspended in water comprise the biologically active substance and the excipient.

Claim 28 (new): The method according to claim 26 wherein the organic solvent is selected from the group consisting of dimethyl formamide, dimethyl sulfoxide, alcohols, acetone, ethyl acetate and chloroform.

Claim 29 (new): The method according to claim 26 wherein the average particle size of the particles suspended in water is from about 10 nm to about 10 μm.